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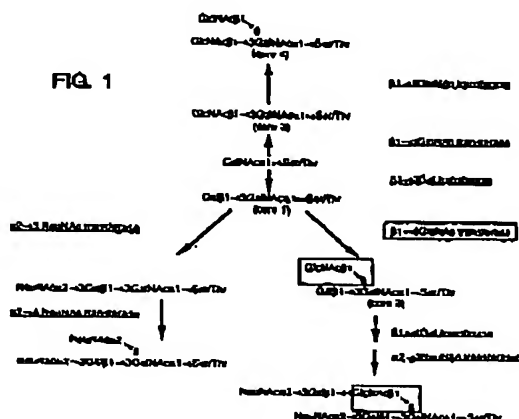
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34 A novel-beta1-6 N-acetylglucosaminyltransferase, its acceptor molecule, leukosialin, and a method for cloning proteins having enzymatic activity.

37 The present invention provides a novel $\beta 1 \rightarrow 6$ N-acetylglucosaminyltransferase, which forms core 2 oligosaccharide structures in O-glycans, and a novel acceptor molecule, leukosialin, CD43, for core 2 $\beta 1 \rightarrow 6$ N-acetylglucosaminyltransferase activity. The amino acid sequences and nucleic acid sequences encoding these molecules, as well as active fragments thereof, also are disclosed. A method for isolating nucleic acid sequences encoding proteins having enzymatic activity is disclosed, using CHO cells that support replication of plasmid vectors having a polyoma virus origin of replication. A method to obtain a suitable cell line that expresses an acceptor molecule also is disclosed.

FIG. 1



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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
D,X	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA., vol.86, no.4, February 1989, WASHINGTON US pages 1328 - 1332 ADAM PALLANT ET AL. 'Characterization of cDNAs encoding human leukosialin and localization of the leukosialin gene to chromosome 16' * abstract * * page 1329, left column, paragraph 3 - page 1330, left column, paragraph 4 * * page 1331, right column, paragraph 2 - page 1332, left column, paragraph 1 * ---	9-15	C12N15/54 C12N9/10 C12N15/12 C07K13/00 C12N15/86 C12N15/64 C12N5/10
X	JOURNAL OF BIOLOGICAL CHEMISTRY, vol.266, no.13, 5 May 1991, BALTIMORE, MD US pages 8483 - 8489 SHINICHI KUDO ET AL. 'A short, novel promoter sequence confers the expression of human leukosialin, a major sialoglycoprotein on leukocytes' * abstract * * page 8484, right column, paragraph 2 - page 8485, left column, paragraph 1; figure 2 * --- -/-	9-15	TECHNICAL FIELDS SEARCHED (Int.Cl.5) C12N C07K
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 13 January 1995	Examiner Montero Lopez, B
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons * : member of the same patent family, corresponding document</p>			



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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. CL.5)
X	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA., vol.86, no.8, April 1989, WASHINGTON US pages 2819 - 2823 C. SIMON SHELLEY ET AL. 'Molecular characterization of sialophorin (CD43), the lymphocyte surface sialoglycoprotein defective in Wiskott-Aldrich syndrome' * abstract * * page 2820, right column, paragraph 3; figure 2 * * page 2822, left column, paragraph 4 - right column, paragraph 1 *	9-15	
X	NUCLEIC ACIDS RESEARCH., vol.19, no.1, 11 January 1991, ARLINGTON, VIRGINIA US pages 85 - 92 MICHAEL HEFFERNAN ET AL. 'Polyoma and hamster papovavirus large T antigen-mediated replication of expression shuttle vectors in Chinese hamster ovary cells' * page 85, right column, paragraph 2 - page 86, left column, paragraph 3 * * page 86, right column, paragraph 3 * * page 87, left column, last paragraph - right column, paragraph 1 * * page 90, left column, paragraph 2 - right column, paragraph 1 * * page 91, left column, last paragraph - right column, paragraph 2 * -/--	16-23	
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P, X	<p>PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA., vol.89, no.19, 1 October 1992, WASHINGTON US</p> <p>pages 9326 - 9330</p> <p>MARTI F.A. BIERHUIZEN ET AL. 'Expression cloning of a cDNA encoding UDP-GlcNAc:Gal-beta-1-3-GalNAc-R (GlcNAc to GalNAc) beta-1-6GlcNAc transferase by gene transfer into CHO cells expressing polyoma large tumor antigens'</p> <p>* abstract *</p> <p>* page 9326, right column, paragraph 3 *</p> <p>* page 9327, left column, paragraph 4 - paragraph 5 *</p> <p>* page 9327, right column, paragraph 3 - page 9328, right column, paragraph 1; figure 3 *</p> <p>* page 9329, left column, paragraph 3 - right column, paragraph 1 *</p> <p>* page 9329, right column, paragraph 3 *</p> <p>-----</p>	1-8, 16-25	
			TECHNICAL FIELDS SEARCHED (Int. CL.5)
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